

# INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/17997

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/705 C07K16/28 A61K38/17 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 31799 A (HUMAN GENOME SCIENCES INC ;NI JIAN (US); ROSEN CRAIG A (US); GENTZ) 23 July 1998 (1998-07-23) page 53; claims 1-21; table 1	1-16, 19, 20
X	DATABASE EMBL 'Online! EBI, HINXTON, UK TrEmbl Database, AC 043377, 1 June 1998 (1998-06-01) MURRAY, J. ET AL.: XP002127150 abstract	1-11

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

14 January 2000

Date of mailing of the international search report

01/02/2000

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online!  EBI, HINXTON, UK  TrEmbl Database, AC P97860,  1 May 1997 (1997-05-01)  TANIGUCHI, H. ET AL.: "Cloning and  expression of a novel gene for a protein  with leucine-rich repeats in developing  mouse nervous system"  XP002127151  abstract</p>	1-11
P,X	<p>-----  WO 99 14328 A (CHEN JIAN ;GENENTECH INC  (US); PENNICA DIANE (US); YUAN JEAN (US);)  25 March 1999 (1999-03-25)  claim 2; figures 25,26  -----</p>	1-16,19, 20

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International application No.

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## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
Remark: Although claims 19, 20  
are directed to a method of treatment of the human/animal  
body, the search has been carried out and based on the alleged  
effects of the compound/composition.
2. ☒ Claims Nos.: 17, 18  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such  
an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all  
searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment  
of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report  
covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is  
restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 17,18

Claims 17, 18 refer to an antagonist and agonist of the polypeptides without giving a true technical characterization. Moreover, no such compounds are defined in the application. In consequence, the scope of said claims is ambiguous and vague, and their subject-matter is not sufficiently disclosed and supported (Art. 5 and 6. PCT). No search can be carried out for such purely speculative claims whose wording is, in fact, a mere recitation of the results to be achieved.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Patent Application No

PCT/US 99/17997

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9831799 A	23-07-1998	AU 5923398 A	07-08-1998
		AU 6030398 A	07-08-1998
		WO 9831800 A	23-07-1998
		AU 5927398 A	07-08-1998
		AU 6241698 A	07-08-1998
		WO 9831818 A	23-07-1998
		WO 9831801 A	23-07-1998
		WO 9831806 A	23-07-1998
WO 9914328 A	25-03-1999	AU 9317898 A	05-04-1999
		AU 9312198 A	05-04-1999
		AU 9484398 A	05-04-1999
		WO 9914327 A	25-03-1999
		WO 9914234 A	25-03-1999
		AU 9395998 A	05-04-1999
		WO 9914241 A	25-03-1999
		AU 9317498 A	05-04-1999
		AU 1126099 A	17-05-1999
		AU 1288399 A	17-05-1999
		WO 9921998 A	06-05-1999
		WO 9921999 A	06-05-1999
		AU 1532499 A	15-06-1999
		WO 9927098 A	03-06-1999
		AU 1703399 A	15-06-1999
		WO 9927100 A	03-06-1999